

FIGURE 1

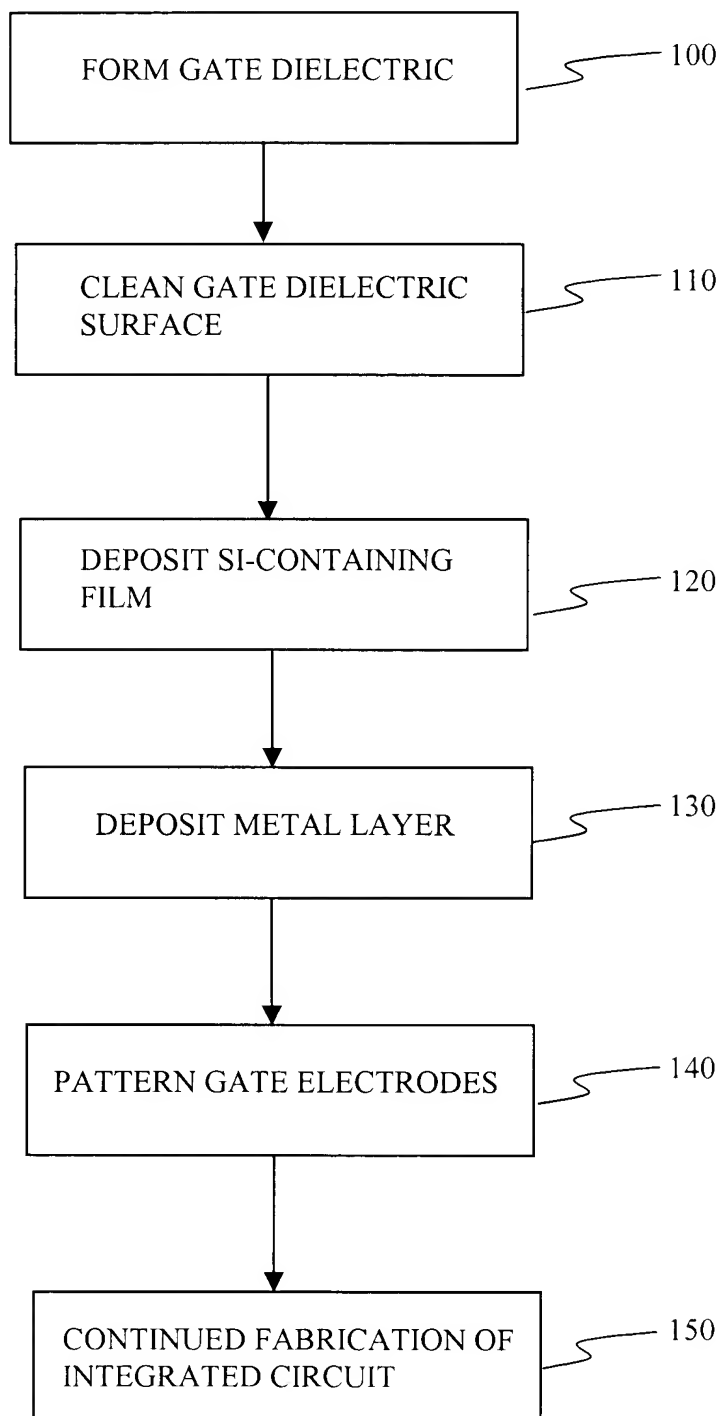


FIGURE 2

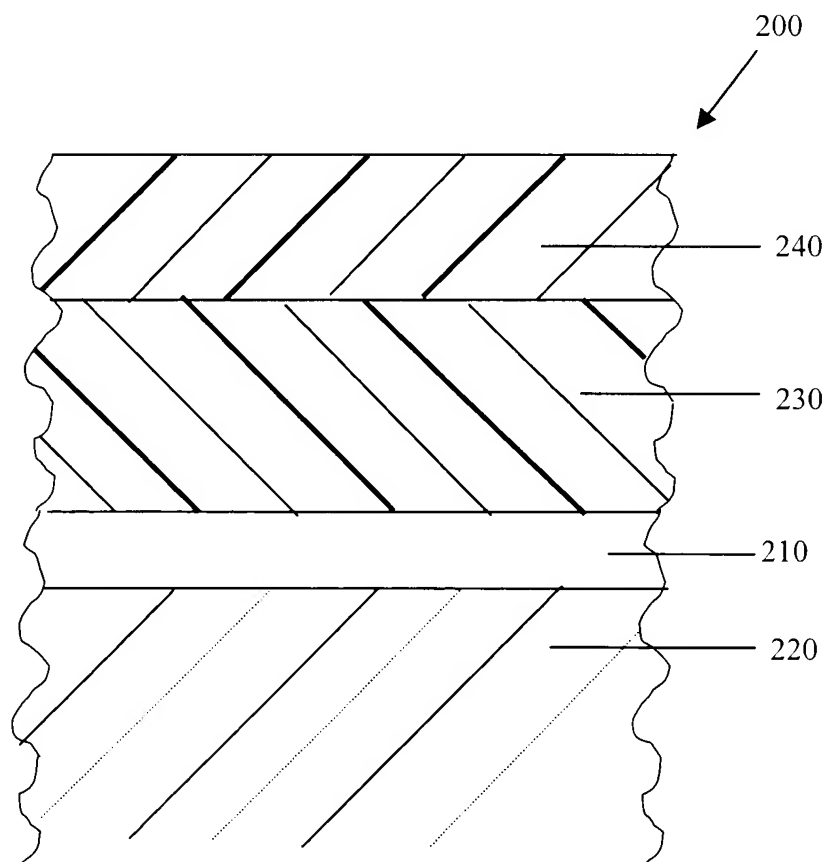
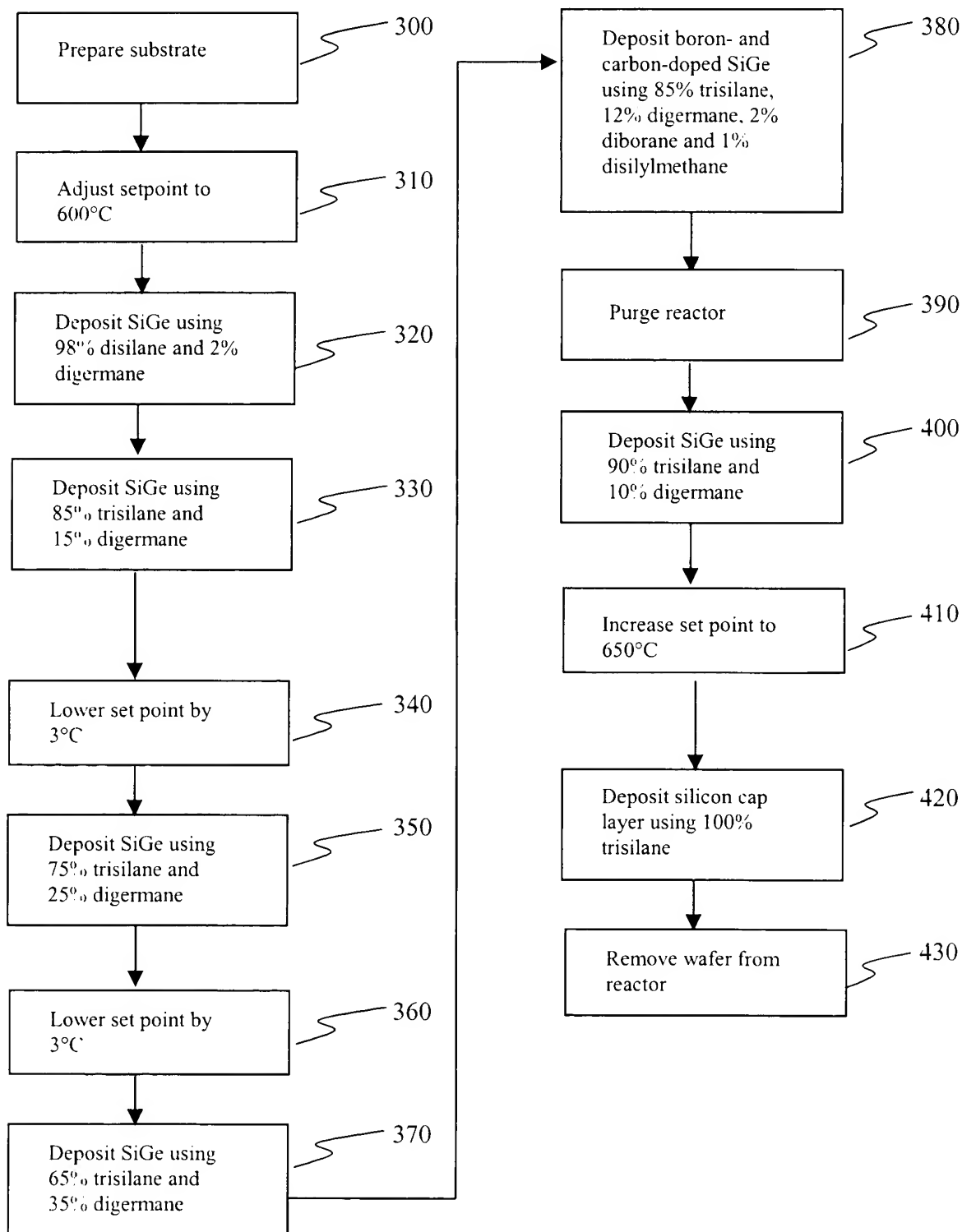


FIGURE 3



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Figure 4: Preferred Ge concentration profile for epitaxial Si-Ge layer in base layer of a heterojunction bipolar transistor

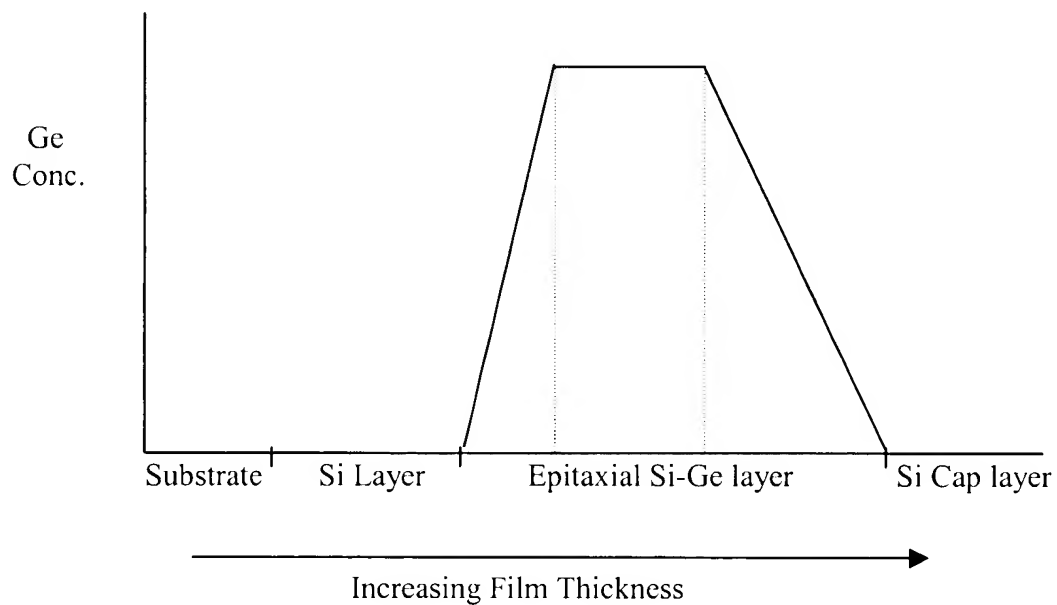


Figure 5: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 600°C

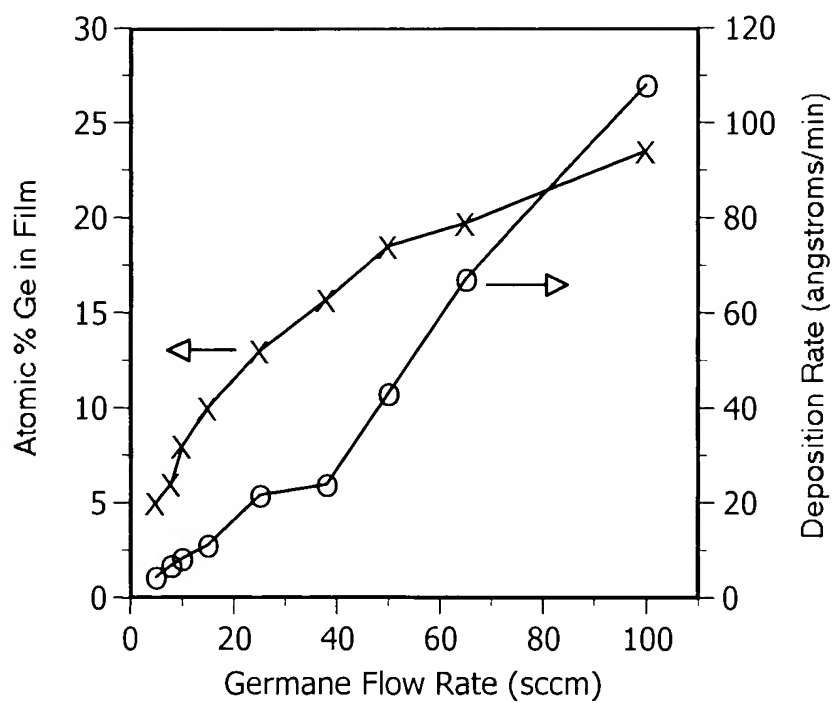


Figure 6: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 625°C

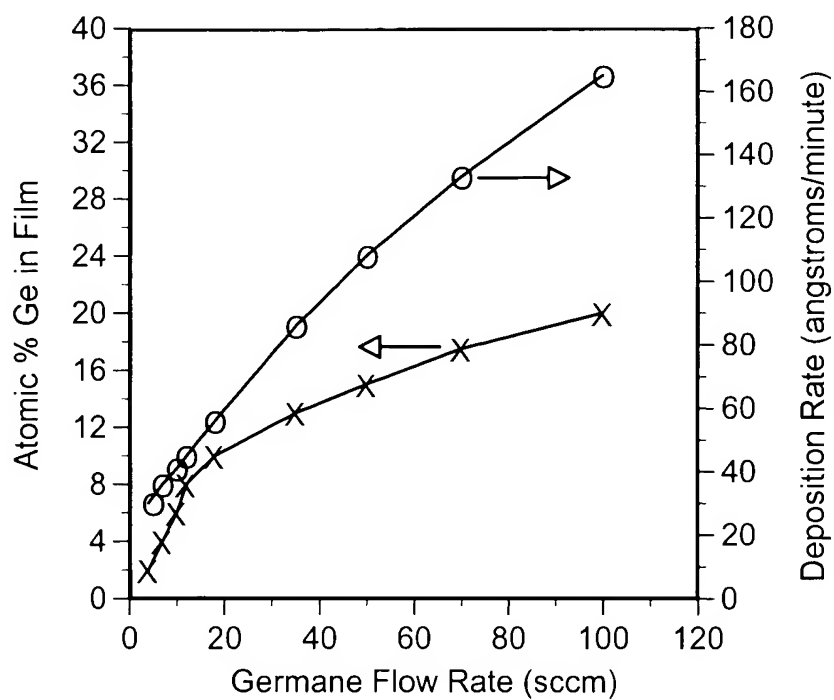


Figure 7: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 650°C

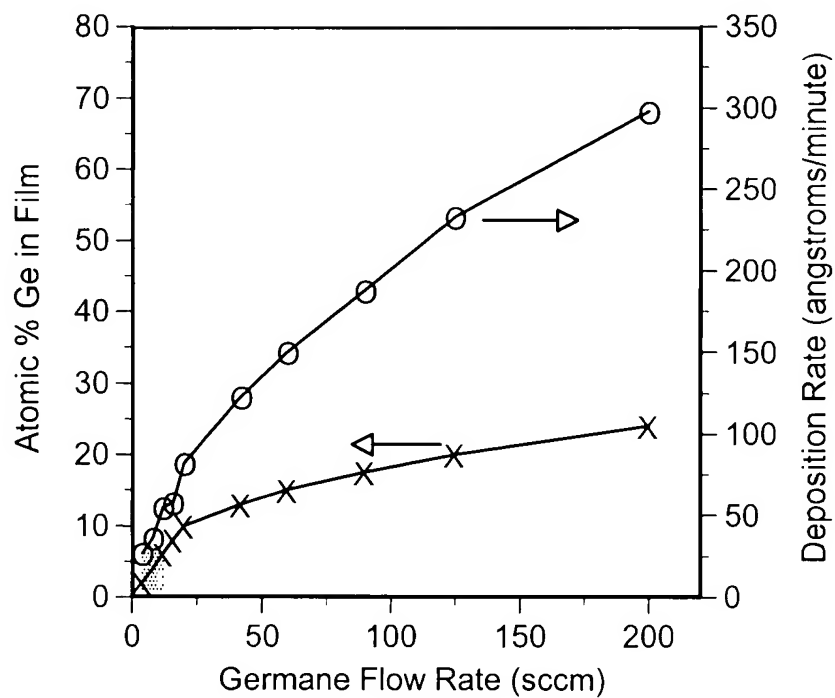


Figure 8: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 700°C

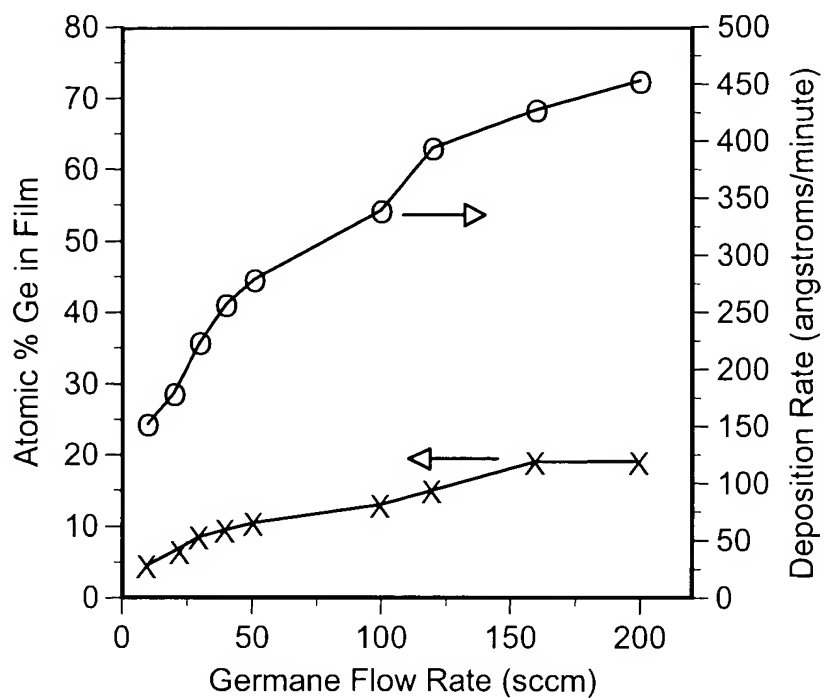




Figure 9: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Trisilane at 600°C (H<sub>2</sub> Flow Rate = 20 slm)

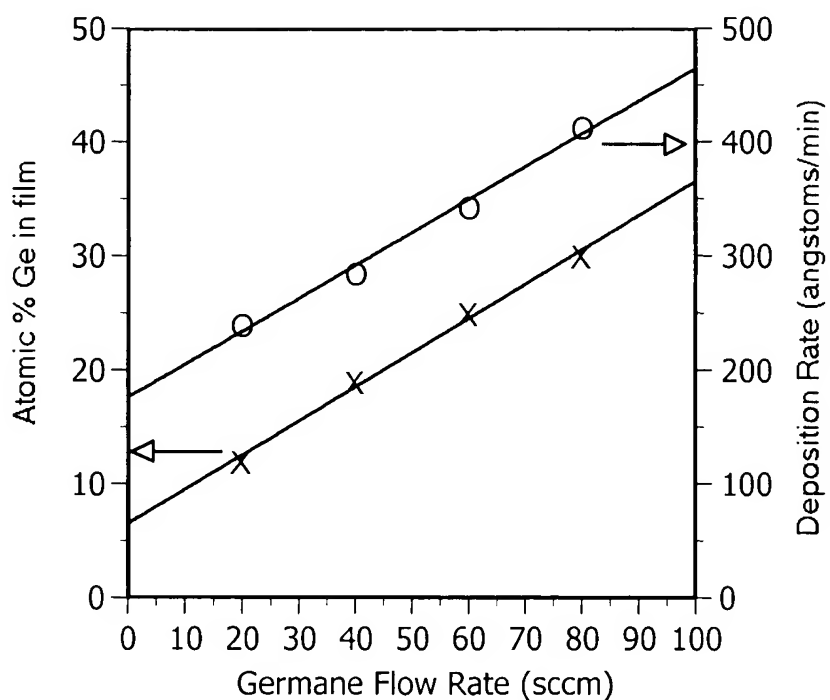
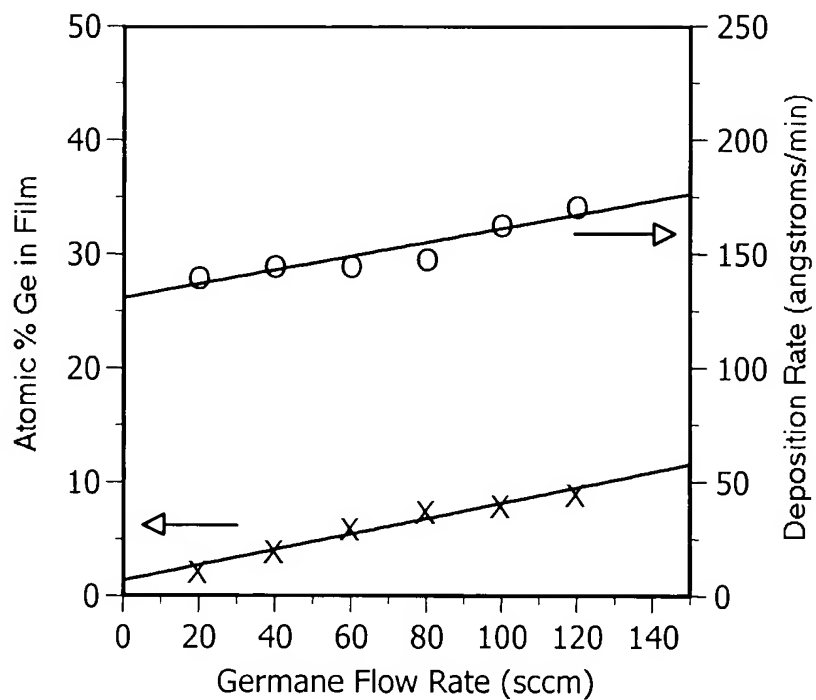
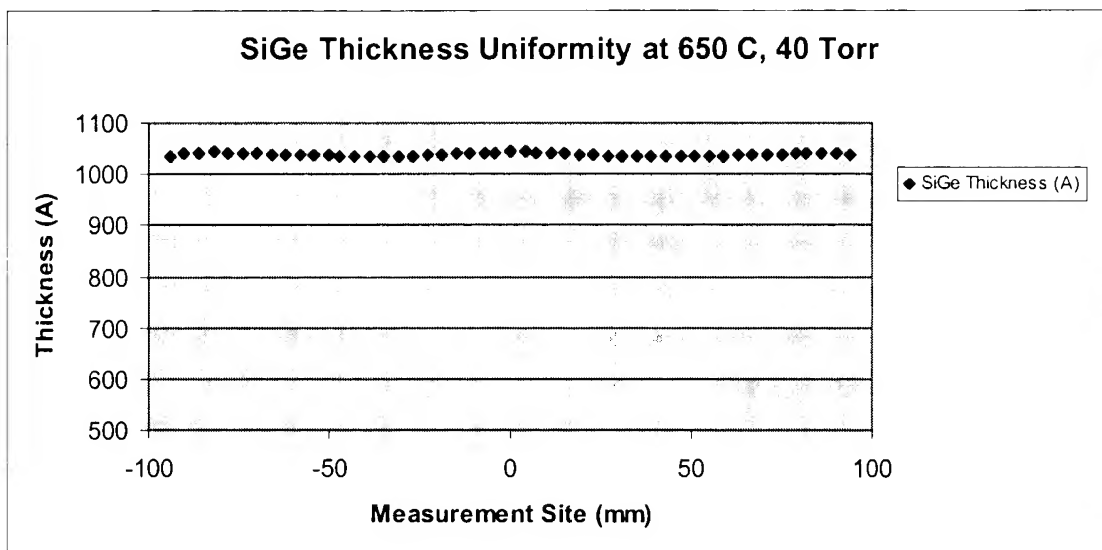


Figure 10: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Trisilane at 600°C (H<sub>2</sub> Flow Rate = 30 slm)

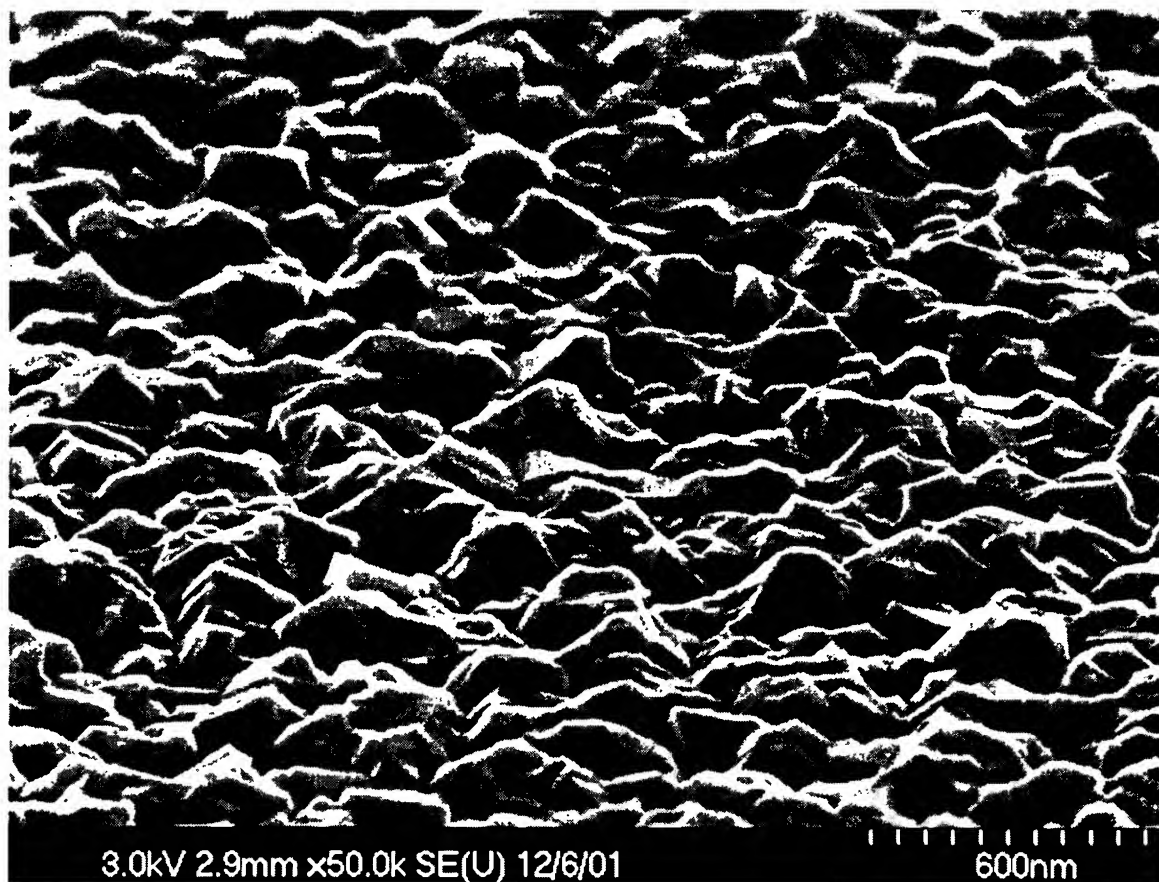


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FIGURE 11



**FIGURE 12**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Silane and Germane**



**FIGURE 13**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Silane and Germane**

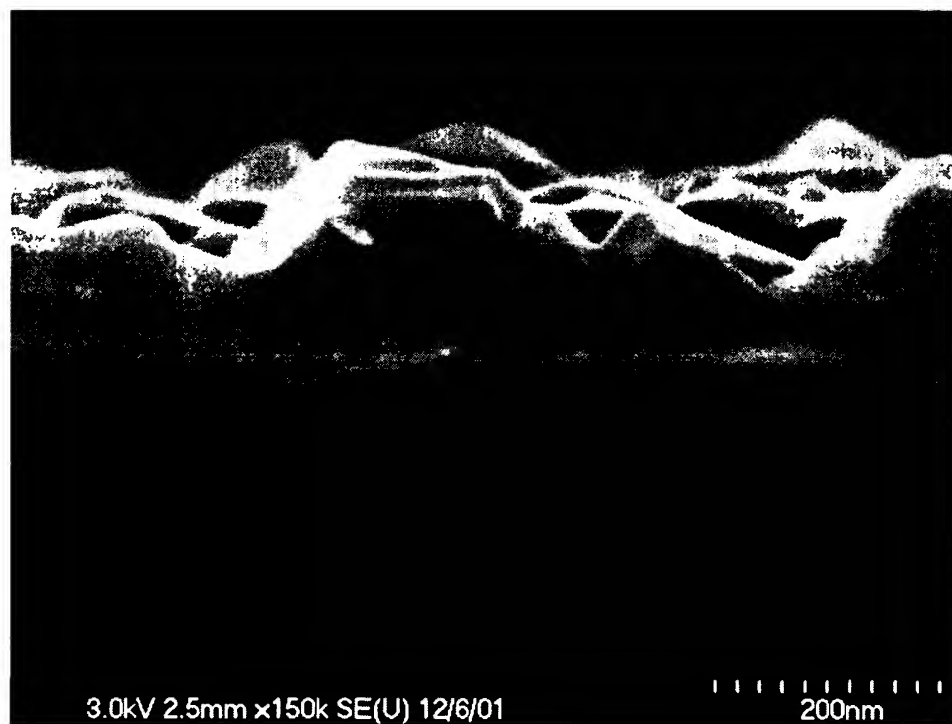
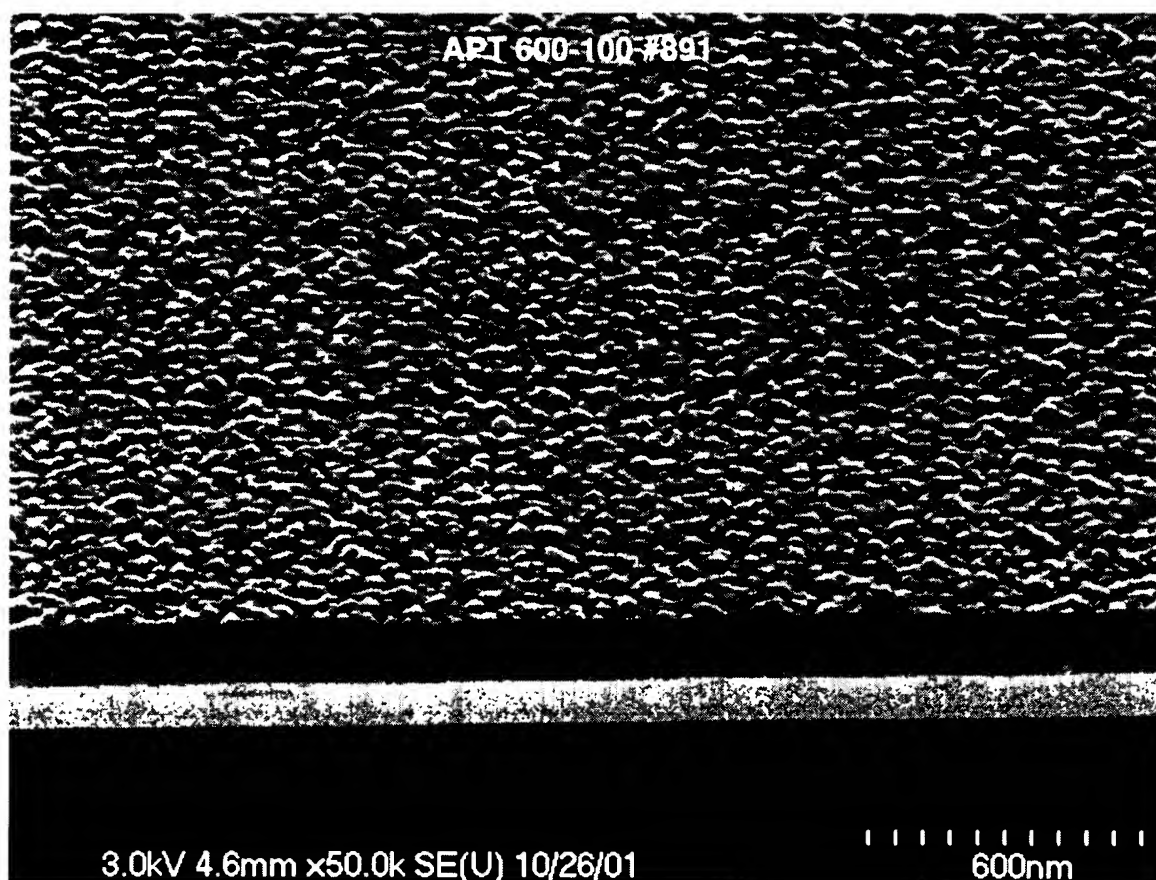


FIGURE 14  
SEM Photomicrograph of Si-Ge Film Deposited Using Trisilane and Germane



**FIGURE 15**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Trisilane and Germane**

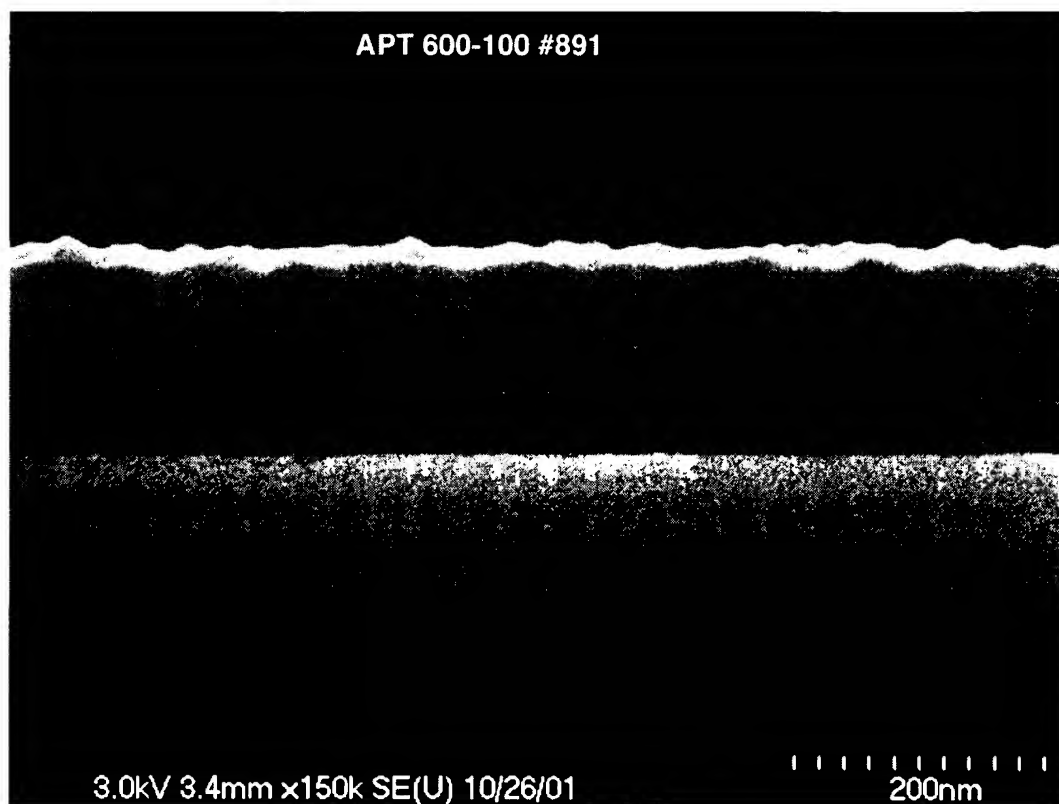


FIGURE 16  
ARRHENIUS PLOT FOR SILANE, DISILANE AND TRISILANE

